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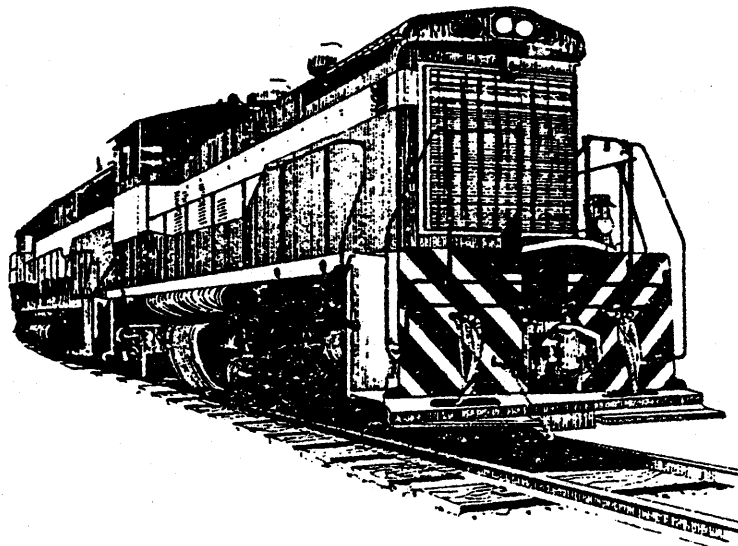
Comment Due Date: March 12, 1984



**Supplement to
Draft
Environmental Impact Statement**

Finance Docket No. 30186

**Tongue River Railroad Company
—Construction and Operation—
of a line of railroad in Custer,
Rosebud, and Powder River Counties, Montana**



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Office of Transportation Analysis
Section of Energy and Environment**

SERVICE DATE

INTERSTATE COMMERCE COMMISSION
Washington, DC

JAN 19 1984

SUPPLEMENT TO DRAFT ENVIRONMENTAL IMPACT STATEMENT

FINANCE DOCKET NO. 30186

TONGUE RIVER RAILROAD COMPANY -- CONSTRUCTION AND OPERATION -- OF
A LINE OF RAILROAD IN CUSTER, ROSEBUD, AND POWDER RIVER COUNTIES,
MONTANA

NOTICE TO THE PARTIES:

The Tongue River Railroad Company proposes to construct and operate an 89-mile rail line in southeastern Montana. The rail-line, which would connect to the Burlington Northern (BN) mainline, would haul coal from proposed and potential coal mines in the area. On July 15, 1983, the Commission served a Draft Environmental Impact Statement (DEIS) for the above application. The DEIS addressed, among other things, the environmental impacts of rehabilitation and use of Milwaukee Road's Miles City interchange yard. However, as an alternative to use of the Milwaukee Road facilities, the applicant has recently developed as an option the possibility of constructing a yard and associated facilities to the south and west of Miles City, connecting to the BN mainline at that point. The Supplement to the DEIS addresses the environmental impacts of this option.

Additional information on the DEIS Supplement, including copies of the document, may be obtained from Carl Bausch, Section of Energy and Environment, Room 4143, Interstate Commerce Commission, Washington, DC 20423 (202-175-0800). Parties to the proceeding and other interested persons may comment on the

Supplement by submitting representations to the above address on
or before March 12, 1984.

(SEAL)

James H. Bayne
Acting Secretary

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 EXECUTIVE SUMMARY	1
1.1 Introduction	1
1.2 Environmental Impact Summary	1
1.2.1 Land Use	2
1.2.2 Socioeconomics	2
1.2.3 Transportation	2
1.2.4 Energy	3
1.2.5 Air Quality	3
1.2.6 Noise	3
1.2.7 Safety	3
1.2.8 Soils and Geology	3
1.2.9 Hydrology and Water Quality	3
1.2.10 Aquatic Ecology	3
1.2.11 Terrestrial Ecology	4
1.2.12 Cultural Resources	4
1.2.13 Aesthetic Resources	4
1.2.14 Comparison with Proposed Action	4
2.0 PURPOSE AND NEED FOR ADDENDUM TO TONGUE RIVER RAILROAD DRAFT ENVIRONMENTAL IMPACT STATEMENT	7
3.0 DESCRIPTION OF THE BURLINGTON NORTHERN OPTION	8
4.0 IMPACT ANALYSIS	10
4.1 Land Use	10
4.1.1 Construction	10
4.1.2 Operation and Maintenance	11
4.1.3 Comparison with Proposed Action	12
4.2 Social and Economic Impacts	12
4.2.1 Construction	12
4.2.2 Operation and Maintenance	13
4.2.3 Comparison with Proposed Action	13
4.3 Transportation	16
4.3.1 Construction	16
4.3.2 Operation and Maintenance	16
4.3.3 Comparison with Proposed Action	18
4.4 Energy	18

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
4.5 Air Quality	19
4.5.1 Construction	19
4.5.2 Operation and Maintenance	19
4.6 Noise	19
4.6.1 Construction	19
4.6.2 Operation and Maintenance	19
4.6.3 Comparison with Proposed Action	21
4.7 Safety Impacts	21
4.7.1 Construction	21
4.7.2 Operation and Maintenance	21
4.7.3 Comparison with Proposed Action	23
4.8 Soils and Geology	24
4.9 Hydrology and Water Quality	24
4.10 Aquatics	24
4.10.1 Construction	24
4.10.2 Operation and Maintenance	25
4.10.3 Comparison with Proposed Action	27
4.11 Terrestrial Ecology	27
4.12 Cultural Resources	27
4.13 Aesthetic Resources	27
4.13.1 Construction	27
4.13.2 Operation and Maintenance	28
4.13.3 Comparison with Proposed Action	28
5.0 UNAVOIDABLE ADVERSE IMPACTS OF THE BURLINGTON NORTHERN OPTION	29
6.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES AND ENVIRONMENTAL VALUES	30
7.0 RELATIONSHIP BETWEEN SHORT TERM USE OF THE ENVIRONMENT AND LONG TERM PRODUCTIVITY	31

LIST OF TABLES

<u>Table Number</u>		<u>Page</u>
1	Summary Comparison of Proposed Action and Burlington Northern Option	5
2	Land Required for Proposed Action and Burlington Northern Option	10
3	Projected Railroad Construction Expenditures by Location of Expenditure for the BN Option	13
4	Projected Tax Revenue Receipts, by Jurisdiction: Burlington Northern Option, Medium Production Scenario, 1984-2010 (1981 \$000s)	14
5	Projected Net Fiscal Balance, by Jurisdiction, in Custer County: Burlington Northern Option, Medium Production Scenario, 1984-2010 (1981 \$000s)	15
6	Cumulative Net Fiscal Balance Comparison for Custer County Jurisdictions (1981 \$000s)	15
7	Vehicular Delays in Miles City: Proposed Action and Burlington Northern Option, Medium Production Scenario	17
8	Projected Accident Rates at BN and Milwaukee Crossings in Miles City, Medium Production Scenario, 1987-2011	22
9	Projected Train-Miles from Station 180 to the Burlington Northern Tie-In, Medium Production Scenario	23

LIST OF FIGURES

<u>Map Number</u>		<u>Following Page</u>
1	Proposed and Optional Tongue River Railroad Connections at Miles City	7
2	Miles City National Fish Hatchery	24

1.0 EXECUTIVE SUMMARY

1.1 Introduction

This addendum to the Tongue River Railroad Draft Environmental Impact Statement (DEIS) was prepared under the supervision of the Interstate Commerce Commission's (ICC) Section of Energy and the Environment in response to the Tongue River Railroad Company's (TRRC) proposed optional location for a northern terminus and yard facility. The proposal, referred to as the Burlington Northern (BN) Option, was not developed in time to be included in the DEIS. Preliminary examination of the BN Option indicated that further in-depth analysis was warranted. This addendum presents that analysis.

The BN Option would include a connection with the Burlington Northern mainline and the development of a yard and facilities area south and west of Miles City, at a point near Branum Lake. Much of the former Branum Lake Fishing Access Site would be required for development of the yard and facilities area (see footnote, page 11). This option would eliminate the need for rehabilitation of the Milwaukee Road railroad yards in Miles City. It also would eliminate the use of Milwaukee Road right-of-way and the construction of new trackage north of the present Burlington Northern right-of-way. The large cut through the "Camel's Back" and fill for the BN crossing also would be eliminated.

The same number of trains would interchange with Burlington Northern traffic with the BN Option as with the Proposed Action. However, if the BN Option were constructed, one-third less train traffic would move through Miles City and only one railroad transportation corridor would be utilized in that community. Two-thirds of TRRC trains would move east from the new interchange yard, and one-third would move west.

The BN Option will be considered as an option within the Proposed Action.¹ It also will be considered as an optional terminus for a line along the proposed Tongue River Road Route.

1.2 Environmental Impact Summary

The BN Option would not affect any of the analyses conducted south of station 180+00, approximately 4,000 feet south of U.S. Interstate 94. Further, impacts associated with construction scheduling and labor projections will not change, as those factors will remain consistent with that presented in the DEIS.

¹In this addendum, the term "Proposed Action" is used to refer to the TRRC's proposed route with the Milwaukee Road connection discussed in the DEIS (July 15, 1983). As noted in this addendum, the BN Option differs from the original proposed action only north of station 180+00.

1.2.1 Land Use

The primary land use impact of the BN Option would be the loss of the former Branum Lake Fishing Access Site. The site has not been used for recreational purposes since 1978. However, since Montana Department of Fish, Wildlife, and Parks personnel assumed control of the Miles City Fish Hatchery in April 1983, they have employed Branum Lake as a source of forage fish used for feed in the hatchery. Construction of the new yards would prohibit continued use of Branum Lake for this purpose.

Long term land use implications of the BN Option, should it be placed immediately north of the Miles City Fish Hatchery, could entail impacts to the latter facility sufficient to warrant its relocation (see Aquatics, section 4.10).

The BN Option would require fewer acres than the Proposed Action. None of the land north of the Burlington Northern mainline, including that occupied by the Miles City Livestock Sales Yard, the Montana Department of Highways, the City of Miles City, and the former Milwaukee Road, would be affected. No private land would be used for the BN Option. The BN Option would require slightly more acreage from the Livestock and Range Research Station (LARRS) than the Proposed Action. The BN Option, however, would impact LARRS differently in that it would eliminate possible impacts to the Nursery Area experimental plots.

1.2.2 Socioeconomics

Distribution of property taxes from the proposed Tongue River Railroad Company's BN Option would differ somewhat from that cited for the Proposed Action. Unlike the former Milwaukee Road yards, the BN Option site would lie entirely outside the city limits of Miles City. As a result, Miles City would accrue no direct property tax revenues from the railroad. The elementary and high school districts and Custer County, however, would receive a proportionally larger share of the tax revenues. The net fiscal balance would not be affected.

1.2.3 Transportation

In the area of the BN Option site, U.S. Highway 10 would experience significant traffic increases, especially during construction. Traffic delays on the Burlington Northern line in Miles City would increase slightly, and an additional grade-separated crossing may be required sooner under the BN Option than it would under the Proposed Action. No emergency service delays would be experienced under the BN Option. One at-grade crossing would be eliminated and fewer trains would pass through Miles City. Overall traffic delays would be reduced under the BN Option.

1.2.4 Energy

The BN Option would eliminate the need for a large cut through the "Camel's Back" area and a large fill for an overpass of the Burlington Northern tracks. This would decrease energy consumption during construction of this segment of the rail line. When considering the energy balance for the entire project, however, the differences between the Proposed Action and the BN Option are negligible.

1.2.5 Air Quality

Fewer windblown emissions during construction would result from the BN Option. Due to the location of the yards and decreased train traffic through Miles City, emissions from fuel combustion would have a less direct effect on the community of Miles City.

1.2.6 Noise

Noise impacts to the community of Miles City would decrease under the BN Option. Noise impacts in the vicinity of the Branum Lake yards would increase, but the L_{eq} increment would be less than 4 decibels.

1.2.7 Safety

The potential for construction-related accidents in Miles City would be eliminated under the BN Option. Likewise, due to elimination of seven public grade crossings north of the Burlington Northern line, and the reduction of train traffic through Miles City, grade-crossing accidents also should be reduced. The potential for crossing accidents on the BN mainline in Miles City would increase somewhat. This could be mitigated by construction of an additional grade-separated crossing in Miles City.

1.2.8 Soils and Geology

Impacts to soils would be consistent with those described in the Draft Environmental Impact Statement.

1.2.9 Hydrology and Water Quality

Impacts to hydrology and water quality would be consistent with those described in the DEIS.

1.2.10 Aquatic Ecology

The most important impact to aquatic ecology from the BN Option would be the effects upon the Miles City Fish Hatchery. The elimination of Branum Lake as a food source would require the hatchery to resume purchasing forage fish from Minnesota sources. Although

detailed studies are necessary to determine the significance of specific impacts, the long term effects of vibration, major fuel, coal, or chemical spills in the yards might impact the hatchery sufficiently to render it inoperable.

Mitigative measures which could minimize or eliminate possible impacts would be: (1) bonding the TRRC against serious environmental impacts; (2) moving the interchanging yards slightly west of the present proposed site; (3) relocating the hatchery to a more suitable location.

1.2.11 Terrestrial Ecology

Impacts to terrestrial ecology would be consistent with those described in the DEIS.

1.2.12 Cultural Resources

Possible impacts to the abandoned Milwaukee Road Depot would be eliminated under the BN Option. In all other respects, impacts would be consistent with those described in the DEIS.

1.2.13 Aesthetic Resources

Impacts to aesthetic resources would generally be reduced by the BN Option. The cut through the "Camel's Back" and the fill over U.S. Interstate 94 would be eliminated. However, the installation of a new railroad yard on the outskirts of Miles City would have an impact on scenic qualities in the immediate vicinity.

1.2.14 Comparison with Proposed Action

The Burlington Northern Option is similar to the Proposed Action in many respects. Only that portion of the line north of station 130+00, approximately 4,000 feet south of U.S. Interstate Highway 94, will differ. Table 1 provides a comparison of the Burlington Northern Option with the Proposed Action for those disciplines where the differences are quantifiable.

TABLE 1

SUMMARY COMPARISON OF PROPOSED ACTION AND BURLINGTON NORTHERN OPTION

IMPACT CATEGORY	PROPOSED ACTION	BN OPTION
LAND USE		
Miles City Nat'l Fish Hatchery	15.06	9.18
Montana Dept. of Fish, Wildlife, & Parks	3.67	60.00
Interstate 94 right-of-way	1.84	1.84
Livestock & Range Research Station (LARRS)	20.63	25.71
Spotted Eagle Recreation Area	0.06	--
Bureau of Land Management	7.12	--
Burlington Northern right-of-way (ROW)	2.07	--
U.S. 10 right-of-way	0.69	--
City of Miles City	0.69	--
Miles City Livestock Sales Yard	8.03	--
Milwaukee Road Yard	<u>67.00</u>	<u>--</u>
Total	126.86	96.73
SOCIOECONOMIC: NET FISCAL BALANCE (1985-2010, \$000)		
Custer County	\$22,419	\$22,653
Miles City	1,406	(336)
Elementary School District #1	16,207	16,311
Custer County High School	2,995	3,333
Cumulative	\$43,027	\$41,961
TRANSPORTATION		
Crossing Requirements		
Overpasses	U.S. 10, BN, I-94	Extension of U.S. 10 at crossing w/ BN ROW
Underpass	--	I-94
Public Grade	1	--
Private Grade	2	2
Vehicle Underpass	2	1 (under I-94 for LARRS)
Miles City (2011)		
Daily Vehicular Delays	2,018	2,829
Emergency Service Delays	27	-0-

TABLE 1. SUMMARY COMPARISON OF PROPOSED ACTION AND
BURLINGTON NORTHERN OPTION (continued)

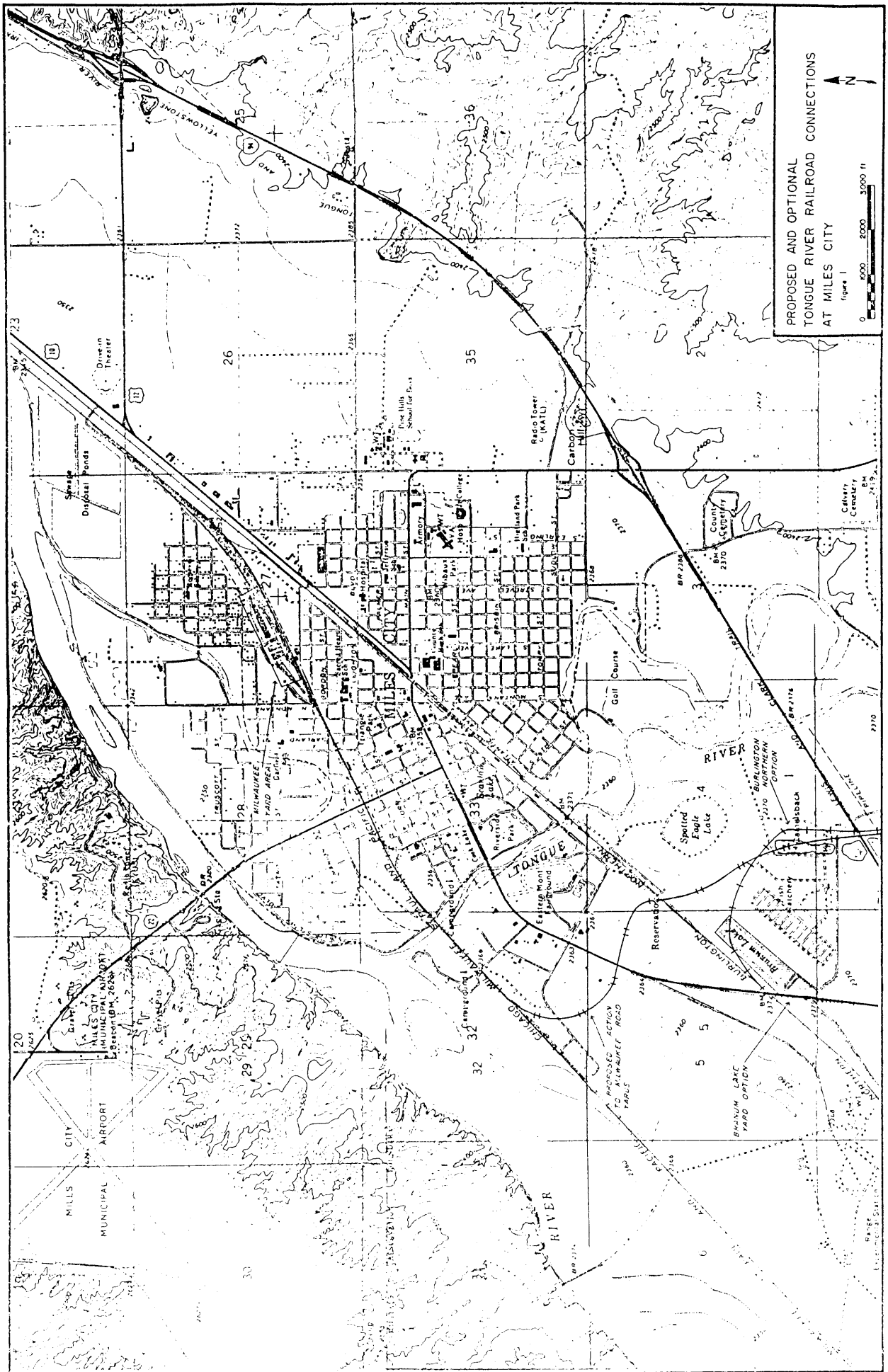
IMPACT CATEGORY	PROPOSED ACTION	BN OPTION
NOISE: FINAL L_{eq} , MILES CITY, MEDIUM PRODUCTION SCENARIO (dBA)		
Abandoned Milwaukee Road Line	63.2	--
Burlington Northern East	64.1	64.1
Burlington Northern West	62.8	61.3
SAFETY: ACCIDENT RATES, MILES CITY, 2011		
Burlington Northern crossings	.148	.178
Milwaukee Road crossings	.262	-0-
CULTURAL RESOURCES		
Eligible or Probably Eligible National Register sites that would be impacted	16	15

2.0 PURPOSE AND NEED FOR ADDENDUM TO TONGUE RIVER RAILROAD DRAFT ENVIRONMENTAL IMPACT STATEMENT

The Interstate Commerce Commission released the Draft Environmental Impact Statement for the proposed Tongue River Railroad on July 15, 1983. The document provided an analysis of the environmental impacts of the rail line along a proposed route (Proposed Action), as well as three possible alternative routes. The document also examined two routing options, within the Proposed Action, around the community of Ashland, Montana. Three of the routes examined, including the Proposed Action, assumed a northern terminus at Miles City, where the shops, facilities and yards formerly utilized by the Chicago, Milwaukee, St. Paul Railroad (Milwaukee Road) could be converted for use by the Tongue River Railroad (see Figure 1).

During October 1983, the Tongue River Railroad Company (TRRC) developed a new proposal for an optional site for facilities and yards at the northern terminus. This optional location would not require the use of the Milwaukee yards or tracks, but would connect to the Burlington Northern mainline, just south and west of Miles City. The new interchange yards and facilities would be located at Branum Lake, currently administered by the Montana Department of Fish, Wildlife, and Parks. This new alternative has been designated the Burlington Northern (BN) Option. Upon preliminary examination, it became apparent that the environmental impacts resulting from the BN Option would vary in some disciplines from those discussed in the draft. It was determined by the ICC that an addendum should be prepared to examine those impacts and provide a comparison with the originally proposed yard location and routing.

The BN Option will be considered by the ICC on the same basis as the optional routings around Ashland. That is, it has been presented as, and will be considered, an option within the Proposed Action. In addition, it will be considered as an option within the Tongue River Road Alternative.



PROPOSED AND OPTIONAL
TONGUE RIVER RAILROAD CONNECTIONS
AT MILES CITY

Figure 1
0 1000 2000 3000 ft

3.0 DESCRIPTION OF THE BURLINGTON NORTHERN OPTION

The Burlington Northern (BN) Option would connect to the Burlington Northern Railroad adjacent to the Miles City Fish Hatchery, just west and south of Miles City, Montana. The present Branum Lake area would be acquired by the Tongue River Railroad Company and would be replaced by a new yard and facilities depot. The entire yard and facilities site would be located outside of the city limits of Miles City. No traffic would use the Milwaukee Road right-of-way, and the Milwaukee Road yards would not be utilized.

The BN Option would diverge from the proposed route at station 180+00 (see Figure 1), approximately 4,000 feet south of U.S. Interstate 94. The right-of-way, slightly to the east of the proposed route, would cross under I-94 and pass to the east of the "Camel's Back" before turning south and west to parallel and eventually to join the Burlington Northern line. This route would cross the northeast corner of Branum Lake.

Facilities required at the BN Option site would include turnouts and trackage, fueling facilities, sanding facilities, an office building, a yard air system and miscellaneous maintenance facilities. A shop for major locomotive and car maintenance and repair would not be constructed. These tasks would be accomplished through existing private maintenance services in Miles City.

The primary trackage requirement would be one track approximately 6,500 feet in length, parallel to the BN tracks. This track would allow switching of a complete unit train. An additional 1,200 feet of parallel trackage would also be installed. Two turnouts would complete the trackage requirements.

Offices and associated facilities would be constructed along the southern property line of the Branum Lake site, on the west end, adjacent to the U.S. Highway 10 overpass. This overpass would be extended to accommodate the additional trackage, while providing access to the facilities site and portions of the Livestock and Range Research Station (LARRS) and the Miles City Fish Hatchery. Fuel storage facilities would be above ground to assure rapid leak and spill detection.

The BN Option would eliminate the need for an overpass of the Burlington Northern tracks, north and east of Branum Lake. Due to the engineering characteristics of the juncture with the BN, the alignment would also avoid disturbance to the "Camel's Back" and pass under, rather than over, U.S. Interstate 94. Additionally, one public at grade crossing and one vehicle underpass would be eliminated by this option. A vehicle underpass at I-94 would still be required for access to the LARRS.

Construction of the terminal and yards at the new site would occur simultaneously with construction of the rail line. Work would begin in 1985. It is likely that the site would be used as a major staging area for construction of the line, thus limiting temporary disturbance elsewhere, and minimizing construction disturbance in Miles City proper.

TRRC train traffic originating at points to the south along the line would be routed downline to the east and west upon reaching the new interchange yards. Approximately two-thirds of the daily train traffic would be routed to the east, passing through Miles City on the existing Burlington Northern right-of-way. No traffic would use the Milwaukee Road right-of-way. Approximately one-third of the TRRC trains would be routed to the west from the Branum Lake site, along the Burlington Northern right-of-way. None of this westbound traffic would pass through Miles City.

4.0 IMPACT ANALYSIS

4.1 Land Use

4.1.1 Construction

The amount of land to be acquired for the right-of-way of the rail line segment from station 180 to the BN Option yard and for the yard itself is depicted in Table 2. The amount totals 30 acres less than the Proposed Action segment from station 180 to the Milwaukee yards. No privately held lands would be affected by the BN Option and land held by the following entities would not be required: Burlington Northern, Montana Department of Highways, Miles City Livestock Sales Yard, City of Miles City, Milwaukee Road, Bureau of Land Management. The option would affect government-owned property, including the Miles City Fish Hatchery and the Livestock and Range Research Station (LARRS).

TABLE 2

LAND REQUIRED FOR PROPOSED ACTION AND BURLINGTON NORTHERN OPTION
(acres)

	PROPOSED ACTION	BN OPTION
Miles City Nat'l Fish Hatchery	15.06	9.18
MT Dept. of Fish, Wildlife, & Parks	3.67	60.00 ^a
Interstate 94 right-of-way	1.84	1.84
Livestock & Range Research Station	20.63	25.71
Spotted Eagle Recreation Area	0.06	--
Bureau of Land Management	7.12	--
Burlington Northern right-of-way	2.07	-- ^b
U.S. 10 right-of-way	0.69	--
City of Miles City	0.69	--
Miles City Livestock Sales Yard	8.03	--
Milwaukee Yard	<u>67.00</u>	<u>--</u>
TOTAL	126.86	96.73

^aThis figure assumes that all of the Branum Lake area would be purchased

^bRight-of-way would be shared with the BN because of parallel trackage

The new interchange yard would occupy approximately 60 acres of the Branum Lake area. This area, formerly known as the Branum Lake Fishing Access Site, once provided recreational fishing to residents

of Miles City.¹ Problems with maintaining an adequate water supply forced its closure in 1978. In 1982, the Montana Department of Fish, Wildlife, and Parks assumed control of the Miles City Fish Hatchery under a long term lease with the U.S. Fish and Wildlife Service. Since April 1978, Fish, Wildlife, and Parks personnel have used Branum Lake to collect forage fish for use as feed at the hatchery.

Before Branum Lake was used for raising forage fish, federal personnel obtained this food supply from sources in Minnesota. Loss of the Branum Lake area as a forage fish site would require Montana Fish, Wildlife, and Parks personnel to utilize that same source of fish food.

The BN Option yard would require approximately 9 acres of the Fish Hatchery site, exclusive of Branum Lake. This compares to 15 acres for the Proposed Action.

The BN Option would affect five more acres of LARRS than would the Proposed Action. Most of the additional acreage is located in the "Fish Hatchery" soil sampling unit. Research in this unit considered the effect of grazing on soil and vegetation. The research value of these sites has been characterized as "limited."

4.1.2 Operation and Maintenance

The operational effects of the TRRC on project area agriculture would be the same with the BN Option as they would with the Milwaukee yards as described in the DEIS (July 15, 1983). Operation and maintenance difference between the two options derives from impacts to the Miles City Fish Hatchery and LARRS.

Under the BN Option, possible impacts to the Nursery Area experimental plots would be avoided. Additional impact, however, may occur to the animal research now taking place along the BN mainline on LARRS.

The most serious operation and maintenance impacts could occur to the Miles City Fish Hatchery. These impacts are fully discussed in section 4.10, Aquatic Ecology. A land use impact would occur if the effects of TRRC operation at the new interchange yard forced the relocation of the Miles City Fish Hatchery.

¹At the time that the DEIS was prepared, plans were pending for what was known as the Branum Lake Fishing Access Site. Consequently, the site was included in the calculations of recreational property, although it was noted that the area had not been used since 1978. Since April 1983, the Montana Department of Fish, Wildlife, and Parks has integrated Branum Lake into the Miles City Fish Hatchery operation. Therefore, for the preparation of this addendum, Branum Lake is considered part of the Fish Hatchery.

4.1.3 Comparison with Proposed Action

The BN Option would affect more acreage of the Livestock and Range Research Station and the Branum Lake area than would the proposed rail line connecting to the Milwaukee yard. The BN Option also would impact the Miles City Fish Hatchery to a greater degree than would the Proposed Action. The BN Option might entail a change in land use for the Fish Hatchery facility (see section 4.10, Aquatic Ecology).

These differences in land use impacts can be attributed primarily to the facilities and yard. The effect of the rail line segment from station 180 to a point just south of the fish hatchery boundary would be the same for both the BN Option and the Proposed Action. The number of acres required for a right-of-way to cross U.S. Interstate 94, 1.84 acres, would remain the same.

Additional differences in land use impact are due to the construction and operation of the Proposed Action across the Burlington Northern mainline to the Milwaukee yards. The Proposed Action would affect the following: Burlington Northern right-of-way, Montana Department of Highways (U.S. 10), the Miles City Livestock Sales Yard, City of Miles City, and Milwaukee yards. The BN Option would not include any of these parcels. It would also avoid Bureau of Land Management land that would be affected by the Proposed Action.

4.2 Social and Economic Impacts

4.2.1 Construction

With some exceptions, the construction of the BN Option would result in impacts similar or identical to those described for the Proposed Action. It is not anticipated that the construction schedule or manpower requirements for construction will change. The timing and nature of impacts associated with the required work force would be consistent with those described in the DEIS.

Construction expenditures for the BN Option would be somewhat higher than those described for the Proposed Action. The majority of these increased expenditures would be due to trackage requirements at the new facility. Table 3 depicts the probable distribution of these expenditures.

The single most important economic impact of construction of the BN Option would be the distribution of property tax revenues for the new interchange facilities. The entire site, unlike the former Milwaukee Road location, is outside of the city limits of Miles City.

A* a result, Miles City would not accrue property tax revenues from the construction of the BN Option, although it would receive the benefits of salaries paid to construction workers. The revenues that would be accrued with the construction of the BN Option would be distributed among Custer County, Elementary School District #1, and Custer County High School. Because the jurisdictions receiving tax revenues are fewer in number, the amounts of tax revenues would increase for each jurisdiction.

TABLE 3

PROJECTED RAILROAD CONSTRUCTION EXPENDITURES
BY LOCATION OF EXPENDITURE FOR THE BN OPTION

ITEM	PROJECT AREA	BILLINGS	OTHER	TOTAL
Right-of-way				
Fencing	\$ 876,910	\$ 97,434	\$ ---	\$ 974,344
Major Structures	617,593	527,289	1,140,539	2,285,421
Ballast	---	---	9,571,458	9,571,458
Sub-ballast	521,148	---	---	521,148
Rail	---	10,744,461	10,744,461	21,488,921
Equipment	5,047,407	40,609,338	46,272,769	91,929,514
TOTALS	\$7,063,058	\$51,978,522	\$67,729,227	\$126,770,807

4.2.2 Operation and Maintenance

The operation and maintenance of the Tongue River Railroad incorporating the BN Option will have social and economic impacts similar to those described for the Proposed Action in the DEIS. The distribution of property tax revenue discussed under Construction will continue for the life of the project.

Table 4 provides estimated tax revenues for all jurisdictions using the BN Option. It should be noted that only jurisdictions in Custer County are affected by this action. Table 5 provides the net fiscal balance projections for Custer County jurisdictions.

4.2.3 Comparison with Proposed Action

If the BN Option is selected, the net fiscal balance, by taxing jurisdiction, will be somewhat different than it would be under the Proposed Action with the Milwaukee Road yards. The elementary and high school districts will experience slightly higher annual and cumulative surpluses for the life of the project. The same situation will exist for Custer County. Miles City, however, will experience a deficit for most of the period. Table 6 depicts the cumulative totals by jurisdiction in Custer County under the Proposed Action and BN Option.

TABLE 4

PROJECTED TAX REVENUE RECEIPTS, BY JURISDICTION
 BURLINGTON NORTHERN OPTION, MEDIUM PRODUCTION SCENARIO, 1984-2010
 (1981 \$000s)

JURISDICTION	TAX REVENUE RECEIPTS BY YEARS											CUMULATIVE TOTAL
	1985	1986	1987	1988	1989	1990	1991	1996	2001	2006	2010	
State	\$ 242	\$2,873	\$5,395	\$ 9,677	\$14,247	\$14,534	\$14,620	\$36,272	\$60,252	\$ 75,684	\$ 91,665	\$1,256,065
Counties:												
Custer	441	918	904	946	936	893	904	957	1,020	1,078	1,084	25,164
Powder River	--	6	49	54	26	30	104	1,017	3,573	7,570	9,344	42,859
Rosebud	390	989	1,166	1,391	1,556	1,933	2,321	3,877	3,956	5,049	3,098	82,459
Cities:												
Broadus	--	2	19	23	13	15	17	44	79	114	111	1,512
Forsyth	--	1	16	31	16	12	18	40	63	92	102	1,360
Miles City	-0-	-0-	35	47	42	19	25	47	77	116	122	1,628
Elementary School Districts:												
Miles City #1	210	295	326	366	358	317	328	371	424	490	501	10,237
Birney #3	90	181	190	189	190	189	207	253	1,754	1,178	210	21,701
Forsyth #4	--	1	22	41	23	17	25	51	87	127	140	1,870
Other S.D.	--	2	2	--	--	1	1	3	5	5	5	114
Colstrip #19	--	1	24	30	13	11	11	25	150	652	1,007	6,408
Ashland #32J	180	514	660	857	1,042	1,796	1,826	3,049	2,645	5,342	7,282	78,272
Broadus #79J	--	2	39	28	15	16	20	51	91	130	127	1,867
Other S.D.	3	11	7	1	2	2	2	4	6	9	11	161
High School Districts:												
Custer	353	735	706	723	719	601	706	735	767	791	795	19,178
Powder River	--	1	9	10	5	6	17	39	470	1,020	1,426	11,128
Forsyth #4	--	1	8	14	8	6	9	18	30	44	49	647
Other H.S.	--	1	1	--	--	--	--	1	2	2	2	34
Colstrip	60	154	182	220	249	307	378	636	635	818	496	13,589
TOTAL	\$1,969	\$6,688	\$9,760	\$14,643	\$19,460	\$20,705	\$21,539	\$47,490	\$76,086	\$100,311	\$117,577	\$1,576,253

TABLE 5

PROJECTED NET FISCAL BALANCE, BY JURISDICTION, IN CUSTER COUNTY^a
 BURLINGTON NORTHERN OPTION, MEDIUM PRODUCTION SCENARIO, 1984-2010
 (1981 \$000s)

YEAR	COUNTY	MILES CITY	GOVERNMENT SUBTOTAL	CUSTER CO. HIGH SCHOOL	ELEM #1	SCHOOLS SUBTOTAL	TOTAL
1984	\$ (0.5)	\$ (0.5)	\$ (1)	\$ --	\$ (2)	\$ (2)	\$ (3)
1985	402	(23)	379	321	120	441	820
1986	859	(44)	815	660	145	805	1,620
1987	852	(17)	835	642	187	829	1,664
1988	925	29	954	696	300	996	1,950
1989	907	17	924	686	68	754	1,678
1990	864	(6)	858	663	27	690	1,548
1991	874	(1)	873	671	246	917	1,790
1996	894	(7)	887	655	190	845	1,732
2001	855	(30)	825	633	109	742	1,567
2006	951	(9)	942	620	107	727	1,669
2010	939	(2)	937	588	76	664	1,601
CUMULATIVE ^b							
TOTAL	\$22,653	\$(336)	\$22,317	\$16,311	\$3,333	\$19,644	\$41,961

^aExcludes "Other School Districts"

^bIncludes entire analysis period

TABLE 6

CUMULATIVE NET FISCAL BALANCE COMPARISON
 FOR CUSTER COUNTY JURISDICTIONS
 (1981 \$000s)

JURISDICTION	PROPOSED ACTION	BN OPTION	DIFFERENCE
Custer County	\$22,419	\$22,653	+234
Miles City	1,406	(336)	-1,742
Government Subtotal	23,825	22,317	-1,508
Elementary District #1	16,207	16,311	+104
Custer County High School	2,995	3,333	+338
Schools Subtotal	19,202	19,644	+442
TOTAL	\$43,027	\$41,961	-1,066

4.3 Transportation

4.3.1 Construction

The construction of the BN Option would affect the transportation systems in the area. The approach to the new yard site along U.S. 10 would likely incur significant traffic increases during construction.

The potential increase in traffic volumes would be reduced by two elements of the Tongue River Railroad Company's (TRRC) proposed plan for railroad construction: (1) the construction of a service road within the rail line right-of-way to transport workers and materials; and (2) the dispersal of construction activity and the construction work force along the right-of-way. The TRRC also has proposed a plan whereby its workers would live in temporary camps along the rail line's right-of-way. Given the proximity of Miles City to the construction area of Branum Lake, workers easily could take advantage of the city's services and facilities. Hence, traffic to and from Miles City would increase while the Branum Lake segment of the rail line was under construction.

Vehicle delays would not occur during the construction of grade-separated crossings. Three public crossings, all of them grade separated, would be constructed along this BN Option. The construction of the segment's two private crossings, both of which are "at-grade crossings," would cause some vehicle delays. A provision that the TRRC would maintain one vehicular traffic lane during all construction activities would ensure minimal delays.

4.3.2 Operation and Maintenance

The operation of the TRRC railroad would delay general vehicular traffic at the two private crossings discussed above and at the Burlington Northern crossings in Miles City. Table 7 presents the projections for delays in Miles City. The percentage of trips that would be delayed during the operation of the TRRC would remain under 2 percent. In 2011, the largest percentage of trip delays, 1.9 percent, would be experienced. The increase in percentage of delayed trips represented by these figures is unlikely to affect either travel behavior or development patterns.

Fire and medical service delays also were estimated for Miles City. No emergency service delays would occur in Miles City under the BN Option. A grade-separated crossing of the Burlington Northern mainline in that community currently is used by fire and medical service vehicles. The concern that emergency service vehicles could be delayed exists only when the BN underpass floods, two or three times a year.¹

¹Interview with Bob Lynan, Fire Department Chief, Miles City, Montana, by Robert E. Taggart, January 28, 1981.

TABLE 7
VEHICULAR DELAYS IN MILES CITY
PROPOSED ACTION AND BURLINGTON NORTHERN OPTION
MEDIUM PRODUCTION SCENARIO

AVERAGE DAILY VEHICULAR DELAYS AT CROSSINGS ^a		PROPOSED ACTION	BN OPTION
1986/87	Delayed vehicles	139	62
	Average delay/vehicle ^b	2.5	2.0
	Percent of trips delayed ^c	0.3	0.1
1991	Delayed vehicles	287	103
	Average delay/vehicle ^b	2.5	2.0
	Percent of trips delayed ^c	0.7	0.2
1996	Delayed vehicles	755	279
	Average delay/vehicle ^b	2.5	2.0
	Percent of trips delayed ^c	1.8	0.6
2001	Delayed vehicles	1,292	486
	Average delay/vehicle ^b	2.5	2.0
	Percent of trips delayed ^c	3.1	1.2
2006	Delayed vehicles	1,605	638
	Average delay/vehicle ^b	2.5	2.0
	Percent of trips delayed ^c	3.8	1.5
2011	Delayed vehicles	2,018	829
	Average delay/vehicle ^b	2.5	2.0
	Percent of trips delayed ^c	4.7	1.9

^aThe table does not include delays for emergency and fire vehicles

^bThe average delay per vehicle is the weighted average for all delayed vehicles

^cThe percent of trips delayed in towns equals total delayed vehicles/ (population \cdot /. 2.8 persons per household x 10 trips per household per day).

Although TRRC trains would add insignificantly to delays experienced at Burlington Northern crossings, accessibility would be reduced in Miles City, given city characteristics and given the projection of total, future train traffic (see DEIS, Table A3-1). The city population is divided by the BN mainline, with 43 percent residing south of

the mainline and 57 percent north of it. Most growth is occurring south of the mainline. The primary commercial area in the city also is divided by the BN mainline, along Main Street north and west of the BN mainline. An additional grade separation may be required to avoid traffic disruption and its potential repercussions -- e.g., its effect on commercial developments.

Additional possible mitigative measures include the installation of crossing-warning devices. The Burlington Northern crossings in Miles City could be upgraded to include flashing lights as a warning device.

4.3.3 Comparison with Proposed Action

The construction of the Proposed Action would produce slightly more traffic delays than the construction of the BN Option. The Proposed Action includes the construction of the rail line across a public road, producing temporary traffic delays. This crossing is avoided by the BN Option. No additional at-grade crossings are proposed for the optional segment.

The Proposed Action using the Milwaukee yards would produce more traffic delays in Miles City than would the railroad operating along the BN Option, as shown in Table 7. Miles City figures for general vehicular traffic delay, medical emergency delays, and fire emergency delays are higher under the Proposed Action. Reduced general vehicular delays under the BN Option are attributed to the reduction of train volumes. Two-thirds of the TRRC trains would run through Miles City from the new interchange yards rather than all trains, as under the Proposed Action. Although some emergency service delays would occur in Miles City under the Proposed Action, none would be experienced in Miles City under the BN Option.

The potential for traffic disruption and reduced accessibility for Miles City residents increases when non-TRRC and TRRC traffic on the BN mainline through Miles City are considered in total. The operation of TRRC trains from the proposed Branum Lake yards, together with non-TRRC trains on BN tracks, would result in the need for a grade-separated crossing. Such a crossing would be required sooner under the BN Option than it would under the Proposed Action.

4.4 Energy

The BN Option would eliminate the need for a large cut through the "Camel's Back" area and a large fill for an overpass of the BN mainline. This would decrease energy consumption during construction of this segment of the rail line. When considering the energy balance for the entire project, however, the differences between the Proposed Action and the BN Option are negligible.

4.5 Air Quality

4.5.1 Construction

Impacts to air quality as a result of construction of the BN Option would not differ significantly from those discussed for the Proposed Action. Decreased fuel consumption as a result of avoidance of the large cut and fill through the "Camel's Back" would be reflected in slightly decreased fuel combustion emissions. A slight decrease in total acreage of disturbance would be reflected in a corresponding decrease in windblown emissions during construction.

4.5.2 Operation and Maintenance

Impacts from operation and maintenance will be identical to those described for the Proposed Action. Removal of the yard and facilities site from Miles City should decrease, to some extent, direct air quality impacts to the community.

4.6 Noise

4.6.1 Construction

The construction of the BN Option would produce short term noise impacts. The use of heavy machinery for the rail line construction would increase noise levels along the right-of-way. At a distance 500 feet from the centerline, the decibel readings would average between 62 and 74 dBA and, at 2,000 feet, between 54 and 67 dBA. Decibel readings could reach 85 dBA within 50 feet of the centerline. Such increases in noise levels can cause temporary distress to sensitive receptors.

Construction-related noise impacts could be mitigated by dispersing heavy equipment along the right-of-way, limiting machinery concentrations that might produce high noise levels. Construction also could be avoided during evening hours or on weekends, when people are more sensitive to noise disruption.

4.6.2 Operation and Maintenance

The operation of the rail line would cause greater long term noise impacts than would its construction. The highest anticipated number of trains per day -- 25 trains in 2011 under the high production scenario -- was applied to calculate the noise levels associated with the operation of the trains.

For the rural segments of the BN Option, the L_{eq} for TRRC trains at 100 feet from the centerline would be 64 dBA. Along the Burlington Northern line, the L_{eq} for TRRC trains at 100 feet from the centerline would be 63.5 dBA. The incremental noise levels in rural areas could rise 23.5 dBA by the year 2011 because of the operation of the railroad.

The L_{dn} estimate for the railroad, at 100 feet from the centerline under the high coal production scenario, is 70.4 dBA in the year 2011. L_{dn} contour lines, established at the Environmental Protection Agency thresholds levels of 55 dBA and 70 dBA, were used to assess the noise impacts to ranch homes and rural residences. The 55-dBA contour line for the rail line is about 3,470 feet from the centerline; the 70-dBA contour line is about 110 feet from that line. The segment from station 180 to the optional Branum Lake yards would not result in greater numbers of rural residences located within the 55-dBA contour line and the 70-dBA contour line. The difference in noise impacts between the BN Option and the Proposed Action is in the impacts to residences within the 55-dBA and 70-dBA contour lines located north of the Burlington Northern mainline along the Proposed Action.

For the proposed new yard itself, the addition of TRRC trains to the Burlington Northern mainline would add little to the existing noise levels experienced in the area. The addition of TRRC trains to Burlington Northern trains would result in a L_{eq} increment of less than 4 decibels. The Spotted Eagle Lake Recreational Area would be one sensitive receptor in the area subject to the impacts that would occur. In addition, the Miles City Fish Hatchery might be subjected to noise levels of a nuisance nature.

The use of the BN Option would confine trains to the Burlington Northern mainline. The assessment of noise impacts to Miles City should consider the city's current experience with train traffic on the Burlington Northern rail line. TRRC trains would add little to the noise levels currently experienced along the Burlington Northern mainline in Miles City. The segment shows an incremental L_{eq} of 3 decibels or less. The elimination of the Milwaukee yards would mean the elimination of the increased noise impacts to Miles City along the abandoned Milwaukee Road line, a segment which exceeds 4 decibels. Considering the community as a whole, noise impacts to Miles City would be reduced with the BN Option since one-third fewer trains would move through the town.

4.6.3 Comparison with Proposed Action

The noise impacts resulting from the construction of the BN Option would differ from those resulting from the construction of the rail line to the Milwaukee yards. The noise impacts attributed to the disturbance of "Camel's Back," required under the Proposed Action, would be eliminated under the BN Option. However, the construction of the Branum Lake yard would create short term noise impacts to the area not experienced under the Proposed Action.

The noise impacts of trains operating along the BN Option and the Proposed Action would be the same for segments between station 180 and the Burlington Northern mainline. The Proposed Action would experience additional impacts along its right-of-way because it extends north of the Burlington Northern mainline to the Milwaukee Road yard. The Proposed Action would also affect Miles City to a greater degree than would the BN Option. With the BN Option, the yard and the BN mainline from that yard into Miles City would experience a L_{eq} increment of less than 4 decibels. In contrast, trains operating under the Proposed Action on the Milwaukee line in Miles City would exceed the threshold of 4 decibels.

4.7 Safety Impacts

4.7.1 Construction

Safety impacts during the construction of the BN Option would be minimal. Most safety situations would involve the operation of heavy equipment by various contractors. In contrast to the construction of the rail line segment to the Milwaukee yards, the operation of equipment in the construction of the BN Option would be reduced. Thus, safety impacts associated with equipment operation would be less under the BN Option.

4.7.2 Operation and Maintenance

During the operation of the rail line, safety impacts primarily concern grade-crossing accidents and train derailments. Because the BN Option would eliminate the need for one rural public grade crossing, the number of rural grade-crossing accidents would be less than that for the Proposed Action. The segment to the new yard includes the same two private grade crossings as the Proposed Action. The impact at these crossings would be the same as that for the Proposed Action. Total grade-crossing accidents would be higher for the Proposed Action than for the BN Option. However, with the BN Option, grade-crossing accidents at BN crossings in Miles City would be slightly higher than under the Proposed Action. This would be offset by the elimination of all such accidents on the Milwaukee Road line. Projected accident rates in Miles City are presented in Table 8.

TABLE 8

PROJECTED ACCIDENT RATES AT BN AND MILWAUKEE CROSSINGS IN MILES CITY
MEDIUM PRODUCTION SCENARIO, 1987-2011^a

CROSSING	1986/87	1991	1996	2001	2006	2011
BN Crossings						
Non-TRRC	.074	.085	.100	.104	.111	.122
BN Option						
TRRC	.004	.011	.018	.030	.044	.056
Total	.078	.096	.118	.134	.155	.178
Proposed Action						
TRRC	.004	.007	.011	.018	.022	.026
Total	.078	.092	.111	.122	.133	.148
Milwaukee Crossings						
BN Option	0	0	0	0	0	0
Proposed Action, TRRC only ^b	.012	.060	.095	.167	.214	.262

^aThe figures represent expected annual accidents (see DEIS, pp. A7-1 to A7-3).

^bNon-TRRC traffic would not be located on the Milwaukee line. The BN Option would not use the Milwaukee line.

Methods of mitigating vehicle collisions at railroad crossings include upgrading crossing warning devices or constructing grade-separated crossings. The at-grade BN crossings in Miles City carrying future BN and TRRC trains would require additional warning devices such as flashing lights. Although a grade-separated crossing exists in Miles City, an additional grade-separated crossing may be required.

The analysis of derailments is based on the following assumptions:

- (1) 9 derailments per 1 million train-miles
- (2) \$40,000 in property damage per derailment
- (3) 0.060 injuries per derailment
- (4) 0.003 fatalities per derailment

The calculation of TRRC train derailments and losses, using the estimated train miles in Table 9 and the four factors listed, results in very low figures for train derailments along this 3-mile segment. The use of the highest estimate, under the medium scenario, of train miles would result in a derailment figure considerably less than 1.

Damages associated with derailments are projected to be \$8,000. The figures for injuries and fatalities would be small, essentially non-existent. Derailment losses that occur would be experienced predominantly by the railroad companies and railroad employees.

TABLE 9

PROJECTED TRAIN-MILES FROM STATION 180
TO THE BURLINGTON NORTHERN TIE-IN, MEDIUM PRODUCTION SCENARIO

YEAR	ADTT ^a	MILES TRAVELED FROM STATION 180 TO: ^b		ESTIMATED TRAIN-MILES ^c	
		PROPOSED ACTION	BN OPTION	PROPOSED ACTION	BN OPTION
1986/87	1	2.8	3	980	1,050
1991	3	2.8	3	2,940	3,150
1996	8	2.8	3	7,840	8,700
2001	14	2.8	3	13,720	14,700
2006	18	2.8	3	17,640	18,900
2011	22	2.8	3	21,560	23,100

^aAverage Daily Train Traffic; see Table A3-9

^bIncludes the parallel track next to the Burlington Northern mainline for purposes of switching a unit train

^c(Average daily trains) x (miles) x (350 operating days per year)

4.7.3 Comparison with Proposed Action

The BN Option entails fewer safety problems because its construction requires less heavy equipment operation. Because the BN Option would eliminate one rural public grade crossing, the optional segment would result in fewer rural crossing accidents. The potential for accidents at Burlington Northern crossings in Miles City would increase slightly as shown in Table 9. Warning device upgrading would be required. Construction of an additional grade-separated crossing would serve to alleviate this situation.

The comparison of safety impacts to Miles City should consider the estimated accident figures for the Proposed Action's Milwaukee Road crossings as well as the BN Option figures for the BN crossing. As shown by Table 8, TRRC trains using the Milwaukee line would produce higher accident figures than TRRC trains using the BN line under the BN Option.

The number of derailments would differ very little for the BN Option and for the Proposed Action. The BN Option includes the parallel track next to the Burlington Northern mainline for purposes of switching a unit train. Thus, the segment measures 0.2 mile more in length than the segment of the Proposed Action. When train-miles are translated into derailment figures, the figures for the BN Option would be only slightly higher than those for the Proposed Action. For example, the number of derailments for the segment to the proposed new interchange yards would be 0.20 in 2011. The number of derailments for the Proposed Action segment to the Milwaukee yards would be 0.19.

4.8 Soils and Geology

Impacts from construction, operation, and maintenance of the BN Option would not differ significantly from those described for the Proposed Action in the DEIS. A slight decrease in total acreage of disturbance would be reflected in a very slight decrease in soil lost to erosion.

4.9 Hydrology and Water Quality

Impacts from construction and operation of the BN Option would not differ significantly from those described for the Proposed Action in the DEIS. A slight decrease in total acreage disturbed would be reflected in a minute decrease in stream sediment loads.

4.10 Aquatics

4.10.1 Construction

Construction of the BN Option would have an impact on aquatic resources in the project area by affecting the Miles City Fish Hatchery. In April 1983, the Montana Department of Fish, Wildlife, and Parks assumed direction and responsibility for the hatchery from the U.S. Fish and Wildlife Service. The facility produces warm-water fish species including walleye pike, brood bass, and crappie. Tentative plans call for channel catfish production in 1984. The facility also is used as a temporary holding area for rainbow trout. All these species are used to stock rivers, lakes, and reservoirs throughout the region. Figure 2 illustrates the fish hatchery facilities layout.

Over the past few years, there has been considerable speculation as to the long term viability of the Miles City Fish Hatchery. Questions of continued federal funding ultimately led to the Department of Fish, Wildlife, and Park's decision to lease the facility. The Department plans to undertake a feasibility study of the fish

MILES CITY NATIONAL FISH HATCHERY CUSTER COUNTY, MONTANA

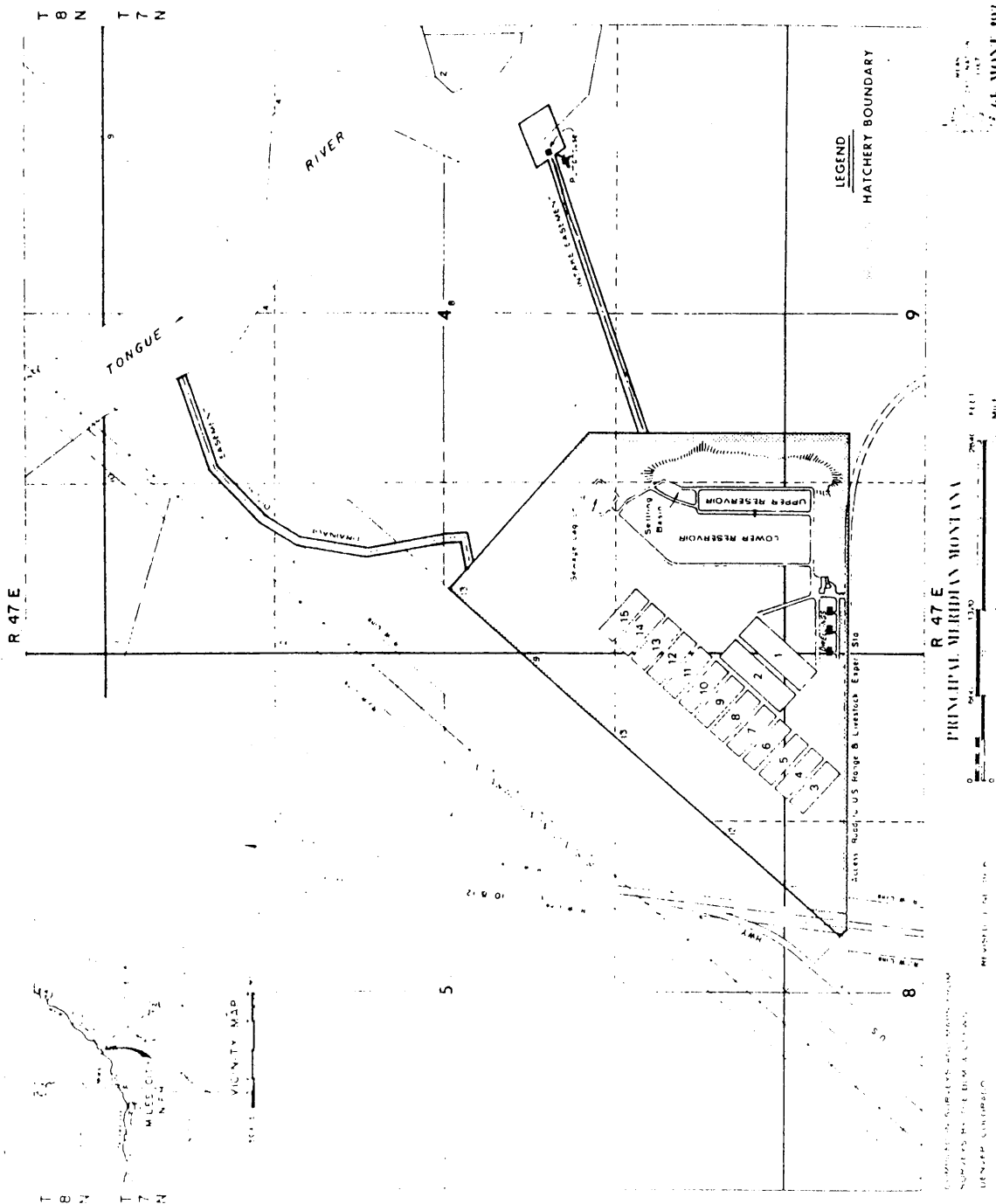


FIGURE 2

hatchery, which will compare the cost of relocating the hatchery to Fort Peck Reservoir or upgrading the present facility at Miles City. One of the perennial problems at the present fish hatchery site has been the dependability of water supply. Consequently, the feasibility study will analyze the costs associated with pumping suitable water from the Yellowstone River to the hatchery to assure a constant supply.

Construction of the BN Option would impact the hatchery by removing Branum Lake. Since April 1983, Branum Lake has been used as a forage fish pond. Should the lake not be available, the Department would be required to resume purchase of forage fish from Minnesota sources.

Construction of the BN Option also would impact the sewage lagoon and possibly a domestic well near the "Camel's Back." Both of these impacts would be similar to those associated with the Proposed Action using the Milwaukee Road yards. The rail line embankment also would cross an intake line for the hatchery. Crossing the line would be accomplished using reinforced concrete or steel casements over the pipe and should not impact the line. Access to the intake pumps would be maintained through an underpass of the rail line currently planned under either the BN Option or the Proposed Action using the Milwaukee Road yards.

An additional impact associated with construction of the rail yard would be the effects of dust emissions to the fish ponds currently in use at the fish hatchery. Introduction of dust to the ponds could have an effect on brood fish and fry. Currently, the hatchery operates the ponds from March until September or October each year. One mitigative measure would be to time construction of the yards, specifically the earthwork, around the scheduled use of the rearing ponds.

4.10.2 Operation and Maintenance

The operational aspects of the Tongue River Railroad using the BN Option are likely to be of a more long term serious nature than the construction-related impacts. The specific concerns are related to two areas: (1) effects of vibration; and (2) effects of spills of coal, fuel, toxic chemicals, or herbicide applications.

Personnel at the Miles City Fish Hatchery state that vibrations from Burlington Northern trains are a nuisance to the hatchery. Hatchery personnel believe that any increased traffic on the Tongue River line, Burlington Northern line, or in the interchange yard would aggravate this nuisance. Of much greater concern, however, is the effect of vibration on the water supply system at the hatchery. The primary water supply for the hatchery is from the Tongue River and is delivered through a pipeline.

As stated above, the placement of the pipeline under a reinforced concrete or steel structure would effectively eliminate vibration effects to the system. However, vibration effects on the concrete structures and pipeline feeding the individual rearing ponds could loosen seals and disrupt the water supply system. The Tongue River Railroad Company has agreed to conduct a monitoring program at the fish hatchery and to assist in minimizing operational and/or construction-related impacts. By establishing a program of monitoring the effects of vibration prior to operation of the railroad, the effects of increased train traffic over the life of the project could be determined.

A full engineering and geotechnical study would be required to determine the specific effects of train traffic on hatchery operations. Even with such a study, it is likely that the conclusions would be conditional. It is clear, however, that vibration and other problems would develop gradually. Traffic in the early years should not be sufficient to cause serious impact to the hatchery. The increase in traffic over the years, however, would be of far greater concern and would require more detailed monitoring and mitigative efforts if the hatchery is to continue in operation. More detailed, site-specific studies of the Miles City Fish Hatchery operation would be necessary to determine the extent of possible vibration impacts to the facility.

The impact of coal dust should not be sufficient to cause serious impact to the rearing ponds. However, a possible spill of coal or other toxic substances could have a serious impact on the rearing ponds, should they be directly affected. Modern fueling procedures in the construction of above-ground, rust-protected fuel tanks should minimize the day-to-day fuel leaks and spills. However, a major spill caused by the rupturing of a tank could affect the rearing ponds directly or could seep to the ground water and subsequently enter the rearing ponds. Such an occurrence could have an immediate effect on the hatchery's fry and brood fish. In addition to these possible coal, fuel, or toxic substance spills, the application of herbicides on the right-of-way could drift onto the rearing ponds and affect hatchery operations. As with vibration, the possibility of serious fuel and chemical spills would increase with TRRC train traffic.

Possible impacts to the Miles City Fish Hatchery are sufficient to warrant consideration of three mitigative measures. The first measure would be to bond the Tongue River Railroad Company for long term and serious impacts to the fish hatchery. Such a security would ensure that sufficient monies would be available to mitigate as yet unquantifiable environmental impacts. Another option for consideration would be the removal of the yards to a location immediately

west of the Branum Lake area. This land is currently owned by LARRS and is designated as irrigated cropland. A yard located in this area would have roughly identical impacts to the currently proposed BN Option. However, it would minimize impacts from spills to the Miles City Fish Hatchery. A third option would be for the TRRC to assist the Montana Department of Fish and Game in relocating part or all of the Miles City Fish Hatchery to an area more suitable for its use. Construction of a facility further from Miles City and more proximate to the Yellowstone River would not only provide a more dependable source of water but would remove the hatchery from a variety of urban impacts currently experienced by the facility.

4.10.3 Comparison with Proposed Action

The BN Option would require 9.18 acres of hatchery property, compared to 15.06 acres for the Proposed Action. The BN Option would, however, more directly interfere with the operation of the hatchery by requiring the removal of the Branum Lake fish forage pond and by increasing the possibility of other serious impacts due to the proximity of the yard and facilities location.

4.11 Terrestrial Ecology

Impacts from construction, operation, and maintenance of the BN Option would not differ significantly from those described for the Proposed Action in the DEIS.

4.12 Cultural Resources

The construction and operation of the BN Option would not result in more impacts to cultural resources than those attributed to the Proposed Action. The use of the Branum Lake yards would eliminate possible impacts to the abandoned Milwaukee Road railroad station and yard, TRR-120. Given a preliminary National Register eligibility recommendation of "probably eligible," the historic site would be susceptible to visual and audible impacts under the Proposed Action.

4.13 Aesthetic Resources

4.13.1 Construction

Some short term impacts to the landscape would be caused by the construction of the rail line along the BN Option. The presence of crews, machinery, construction material, and construction camps would visually impact the landscape during the short term, or during the construction phase of the rail line. The impacts would be visible to residents of Miles City and to travelers on U.S. Highway 10 and U.S.

Highway I-94. The segment would avoid the disruption of the "Camel's Back" construction of a 30-35-foot fill, crossing the Burlington Northern line near Miles City, that would visually impact Spotted Eagle Recreation Area.

4.13.2 Operation and Maintenance

High impacts to the landscape's scenic quality would not result from the operation of the railroad along the BN Option. Moderate, low, and very low impacts would occur along the rail line segment ending at the Branum Lake yards. The nature of these impacts is discussed in the DEIS. The presence and movement of trains in the yard would create greater, but temporary and intermittent, visual contrasts in the landscape.

4.13.3 Comparison with Proposed Action

The route of the Proposed Action disturbs the topographic feature of "Camel's Back" just north of Highway I-94 and involves high fills to cross over the Burlington Northern tracks, Highway I-94, and U.S. Highway 10. Termination of TRRC trains at the BN Option railyards would eliminate the disturbance of "Camel's Back" and the construction of fills over the BN tracks and U.S. Highway 10 and I-94. Impacts of the U.S. 10 crossing would occur but to a lesser degree because the crossing would involve the extension of an existing crossing and not the construction of a new crossing and its required fill.

5.0 UNAVOIDABLE ADVERSE IMPACTS OF THE BURLINGTON NORTHERN OPTION

The BN Option would require the acquisition of the Branum Lake area and its removal from inclusion in the Miles City Fish Hatchery operation. The possible disruption of operations at the Miles City Fish Hatchery also must be considered an unavoidable adverse impact. In addition, tax revenues to the city of Miles City would be less under the BN Option. Noise in the area of the Branum Lake site would increase slightly and the location of the yards would have an adverse effect on the scenic quality of the landscape.

6.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES AND ENVIRONMENTAL VALUES

A total of 96.73 acres would be required for the right-of-way and yard facilities on the BN Option. Sixty acres of this total would be drawn from Branum Lake. The remainder would come from the Miles City Fish Hatchery and the Livestock and Range Research Station, all government entities. This land would, for all intents and purposes, be lost to its current use for the life of the rail line. It is reasonable to conclude that impacts would affect the Miles City Fish Hatchery. If impacts occur and the hatchery is not partially or totally relocated, or if measures were not taken by TRRC to mitigate a serious environmental impact, then the facility could be lost for the life of the TRRC project.

7.0 RELATIONSHIP BETWEEN SHORT TERM USE OF THE ENVIRONMENT AND LONG TERM PRODUCTIVITY

Construction of the BN Option and operation and maintenance of a railroad along this route and in the new interchange yard would affect 30 acres less than would the Proposed Action using the Milwaukee Road yard. Direct effects to Miles City would be reduced in the short and long term in the areas of noise, air quality, safety, transportation, land use, aesthetics, and cultural resources. Agricultural productivity would not be affected differently by this option than it would by the Proposed Action (see DEIS, July 15, 1983).

Construction of the BN Option could affect the long term viability of the Miles City Fish Hatchery. However, it would be possible to relocate a warm water fish hatchery such as that located at Miles City to a site equally suitable for such purposes. Such a relocation would minimize the effects on the long term productivity of aquatic resources in the area.

